HUB REVIEW FINDINGS – MOUNTAIN VIEW STATION

Date of Hub Review:
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Participants:
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Existing Hub Conditions:
The Mountain View Station is an old Southern Pacific Station that has provided Peninsula train service for more than fifty years. Most recently, the VTA completed substantial improvements to this station by extending their light rail train (LRT) service to this location as an end-of-line station. In addition, the bus boarding area was improved and the City of Mountain View rehabilitated the old station building and created a new plaza entryway to the station.

CORRECTIVE ACTIONS

WAYFINDING:
The Mountain View Station is defined by three major components, notably, the Caltrain Station, the VTA LRT station, and the bus/shuttle intermodal bus facility. Due to its close proximity to the Mountain View Station, the Downtown Mountain View/Castro Street business district is an additional element to be included in the evaluation of wayfinding at this transit hub. Currently there is minimal wayfinding signage to connect between the various transit services and the Downtown. Given the synergy between the hub, connecting transit services, and the vibrant downtown environment, it would be appropriate to adopt a new wayfinding sign program to coordinate smooth connections between these entities. As such, the program should provide consistent, easy to read, easy to find hierarchical information that directs customers between transit services and the Downtown businesses, shops and restaurants in a convenient and accessible manner.

Wayfinding program corrective actions should include but not be limited to:

Identification of station or transit operator

- Install station name and operator logos on a monument sign at the station entries (see checklist questions #2, #5; photo #4). Use consistent name for the station (see checklist question #4, photos #7-8);

- Install signs at the entry plaza and historic depot building that identify the Mountain View Station and transit operators (see checklist question #5, photo #5);

- Entry signs should be of an adequate size to be visible to vehicle and pedestrian traffic and located where they will not be blocked by vegetation or impediments (photos #4, #6).

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Moving around or entering or exiting the station

- Install signs at all decision points in the hub which direct passengers between Caltrain and VTA LRT platforms (photos #9-10), VTA bus and shuttle boarding areas, customer information kiosks, bicycle facilities, and pedestrian access points, including:
    - Parking lot adjacent to Caltain platform (photo #11-12);
    - Bus/shuttle transit center (photo #13);
    - Pedestrian walkways along Castro and N.Evelyn Streets;
    - Castro Street and downtown business district;
    - Future RTICs, downtown directories and other customer information.

- Use a consistent set of language, graphics, font styles, font sizes, and colors for directional signs (see checklist questions #7, 8, 13, 14);

- Include operator logos on all directional signs (see checklist question #6);

- Sign placement should be such that they are oriented in the direction of the traveler to ensure visibility (see checklist question #14);

- Use a consistent and bold arrow design at all decision points to ensure that they reinforce the information and direction they are intended to reference (see checklist questions #16, 18);

- Add international icons and symbols where appropriate;

- MTC will work with a transit operator who will take the lead on the development of a comprehensive and consistent wayfinding sign program, including providing funding for program development and P S & E costs.

Identification of where to board or wait for transit

- Clarify signage to identify the appropriate Caltrain platform for north or southbound trains (see checklist question #18);

- Provide double-sided bus flags at bus loading areas (see checklist question #24, photo #14);

- Include operator logos and bus schedules on bus shelters (see checklist question #25);

- Install consistent Braille signs on all bus stop poles and/or shelters. Use mounting hardware that allows for changeable route information (see checklist question #23).

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CUSTOMER INFORMATION:
Caltrain and VTA maps and schedules are posted at their respective boarding platforms; no regional information is included. There is an information kiosk located between the Caltrain platform and the bus/shuttle intermodal facility. This kiosk includes Caltrain and VTA maps and schedules and bicycle information. Bus schedules are posted at a central shelter in the bus area but are not posted at many of the individual bus stops. Except for the bicycle route map, no information is provided about downtown Mountain View or the businesses along Castro Street. Current information on bus/train schedules as well as information on attractions in nearby Downtown would be valuable to patrons of the station.

Corrective actions should include but not be limited to:

Regional Transit Information (RTIC)

Presently, there is no Regional Transportation Information Center (RTIC) at this hub although operator-specific information is posted at boarding areas.

Corrective actions for the RTIC should include:

- The RTIC would include:
  1. The regional 511.org transit map; and
  2. Subregional or system map for local operators (see checklist questions #26, 27).

- Add two RTIC installations: 1) at the VTA LRT platform and 2) at/near the existing kiosk (photo #15) in close proximity to both Caltrain and the bus/shuttle intermodal facility (see checklist question #25);

- Local transit information should be incorporated with the RTICs wherever possible (see checklist questions #28-30);

- Signage should be provided to identify the location of the RTICs.

Local Transit Information

- Local transit information would include (see checklist questions # 28-30, photos #15-18):
  1. Subregional or system map for local operators;
  2. Schedules and service hours;
  3. Fares and specific system information;
  4. Hub layout map; and
  5. Local vicinity map.

- Work with the City of Mountain View and the downtown business association to develop a directory of points of interest, public facilities, shops and restaurants which can be integrated into a hub vicinity map. (see checklist questions #28-30);

- Install bus/shuttle route and schedule information at all bus stops/shelters (see checklist questions #25, 28, 31);

REAL-TIME SIGNS:

Existing Real-Time Signage

Real-time signs are currently located on the VTA LRT platform. The Caltrain platforms have variable message signs which provide schedule information. However, real-time information can also be provided in the event of service delays.

Future Real-Time Signage Installations

The following corrective actions are recommended:

- Install a Mountain View Station real-time sign between the parking lot and the Caltrain platform that lists all of the current services at this hub by operator (see checklist question #38);

- Install a real-time sign in the bus shelter at the intermodal facility that lists all of the current services at this hub by operator (see checklist question #38).

- It is recommended that Caltrain continue the effort to get real-time signage operational at Mountain View and other stations in the system.

- Real-time signs should provide next train, next bus, time, date, and customer information.

STATION PHOTOGRAPHS

1. Caltrain boarding platform-southbound direction.

2. VTA LRT platform. Note Caltrain tracks in foreground. Bus transfer facility is to the left.

3. Bus transfer facility.

4. Signs at entrance to the station. The leftmost sign is located at a pedestrian entrance to the station; the other two signs are located at vehicle entrances. Note that none of these signs includes logos of all available transit services at the station.
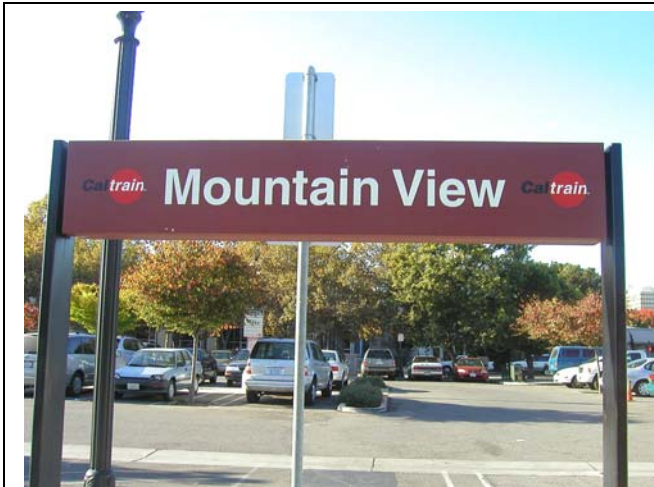

5. Entrance to station closest to downtown/Castro Street. Note the lack of station identification.

6. Station identification at VTA LRT loading platforms.

7. Type 1 station identification at Caltrain loading platform.

8. Type 2 station identification sign at Caltrain loading platform. Note the discrepancy between station names (i.e. Downtown Mountain View, Mountain View).
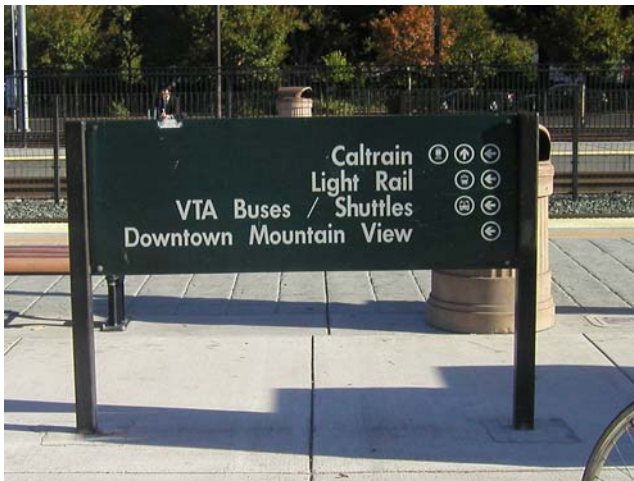

9. Wayfinding signage for Caltrain.

10. Additional Caltrain wayfinding sign.

11. Wayfinding signage from parking lot to station. Note this signage includes directions to transit services as well as to Downtown Mountain View.

12. Signage in photo #8 is blocked by bicycle parking and is placed below eye level.

13. Wayfinding signage in bus facility. The sign includes the needed information but is easily overlooked because of small size.

14. Front and back of bus stop flag in bus transfer facility. Note that route number and destination is not repeated on both sides.
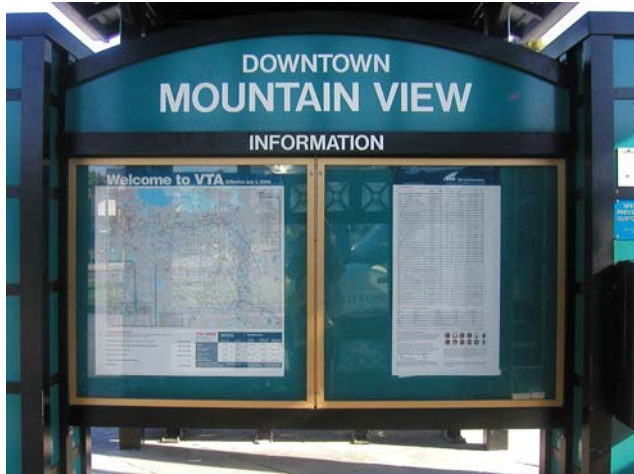
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15. Information kiosk located between bus transfer facility and Caltrain/LRT platforms. It includes VTA and Caltrain information and local bicycle facility map.

16. VTA LRT information at LRT loading platform.

17. VTA bus information at bus transfer facility.

18. Schedule information at Caltrain platform.

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			Hub Review Checklist Summary
			WAYFINDING
			Identification of station or transit operator
Yes	No	N/A	
3	3		1. The hub is clearly identified, visible from surrounding roadways by vehicular and pedestrian traffic. • Pedestrian signs direct passengers to the VTA LRT platform. However, in some directions the signs are too small and are hard to see. • There are no transit station signs visible from roadways. • At many locations around the hub, trees hide existing signs.
3	4		2. Entrances into the hub are clearly identified, visible from approaches by vehicular and pedestrian traffic. • There are small VTA signs but they are hard to see. • Hard to determine where Caltrain actually boards along the platform, which direction the platform serves and where to cross the track. • It is hard to find the Caltrain platforms. • It is not clear who may use the parking lots. • In general, signs are too small and not adequate for this hub.
4	4		3. Transit operators serving the hub are clearly identified at the entrances with their logo and name. • Only one location on N. Evelyn Ave. • Need more operator logo signs.
2	0		4. Station identification reinforces information on printed maps and schedules.
4	2		5. Station name is identified on the entrance sign along with agency logo. • Only a small VTA sign, but no station name sign. • There is an old train depot sign, but it does not identify Caltrain or VTA. • Agency logos are only at the Caltrain and VTA boarding platforms.
			Moving around or entering or exiting the station
Yes	No	N/A	
2	5		6. Agency logos are included with names on directional signs within the facility. • No directional signs. • Existing signs are confusing and too small. Improve signs for Caltrain. • There are no directional signs from the parking lot to the Caltrain and VTA platforms.
0	4	1	7. Turnstile level street exit directional signs also include connection agency names and logs. • No directional signs to other modes or operators. Need a new wayfinding connectivity program for the entire facility.

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2	5		**8.** Vital connections information is grouped together on signs. • Signs are individual to the operator. Need a new wayfinding connectivity program for the entire facility.
0	6		**9.** Connection directions are provided at each decision point and there are no gaps in the connection directional information flow. • There are significant gaps. Existing signs are hard to find or non-existent.
0	5		**10.** Exiting directional signs list a hierarchy of the popular destinations and connecting services to reach these destinations. • There are none. Develop a new wayfinding program to address this issue.
0	3	2	**11.** Where connecting transit service is not within the station, clear directional signage (including walking distance) is provided to these services. All sign placement complies with 2004 ADAAG guidelines. • There are no clear directional signs.
1	4	1	**12.** In stations with multiple track/gate or train/ferry service, confirmation of agency, destination, and real-time departure is associated with those services. • Each agency has their own signs.
1	2		**13.** Clear sightlines are maintained to signs and all sign placement complies with 2004 ADAAG guidelines. • Many more signs needed to link bus and rail connections.
1	5		**14.** Existing connection information is color-coded to emphasize and make it easier to find directions and connections. • No, existing signs are hard to see because they are oriented in the direction of travel rather than perpendicular to the direction of travel. • Existing signs are completely inadequate and hard to see.
1	3		**15.** Signs are legible with adequate message size appropriate for viewing distance, proper contrast ratios, and illumination levels. • Generally adequate. • Some VTA signs are too small. • Caltrain station name signs are too small and sparsely located.
0	6		**16.** Arrows are of consistent design and are bold in visual balance with text and are closely associated with their messages. • Arrows are one of the biggest problems at this hub. They are non-existent or hard to see and read. • Develop a wayfinding sign program that provides a consistent arrow and sign design. • Directional information between operators does not exist.

Yes	No	N/A	Identification of where to board or wait for transit
3	2		**17.** Transit boarding platforms are clearly and boldly identified. • Platforms are clearly identified, but the existing signs are subtle and hard to read. • Some train directional signs are hard to understand.
4	1		**18.** Where a particular transit route utilizes different boarding points for opposite directions of travel, directional signage is provided to the different boarding point including platform route number, name, and route terminus (a place name). • For Caltrain, this is confusing. • Signs and arrows must reinforce information and train direction.
2	4		**19.** At commuter rail, ferry terminals or bus stations, the boarding area identification number is large and bold with service agency, destination, number, and "real-time" departure is provided. • VTA platform is clearly identified. • Signs could be improved to be bolder. • Caltrain boarding signs are confusing.
4	1		**20.** Schedule frequency and last departure information are provided at transit boarding platforms and are consistent with 2004 ADAAG guidelines.
5			**21.** Bus stop signs have agency logos large and bold. • VTA signs are good.
0	3	1	**22.** Bus stop signs have accessibility and parking restrictions as auxiliary signs below the basic bus stop signs. • Need Braille signs at bus stops.
5			**23.** Bus route identification on bus stop signs comply with 2004 ADAAG Guidelines – minimum 2" route number character height. • No destination information. Signs are too small.
1	3		**24.** Bus stop sign faces are visible from each approach direction. • Only on one side. They are difficult to see.
2	3		**25.** Bus shelters have associated bus stop signs which are consistent with the design guidelines described in this checklist. • No logos and bus schedules at bus shelters.

Yes	No	N/A	**CUSTOMER INFORMATION**
			Regional Transit Information (RTIC)
3	2	1	**26.** Transit information in Regional Transit Information Display Cases is accurate and easy to read. • One on Caltain platform. • The one on the VTA platform did not have regional information. • Need to provide several central locations for RTICs.
0	6		**27.** Transit operator and route maps for the nine-county San Francisco Bay Area are posted in the Regional Transit Information Display Cases. • No regional operator map.
			Local Transit Information
1	4		**28.** Hub specific information is provided in a case adjacent to the Regional Transit Information Display Case and at other critical locations at the hub. • Transit information is scattered. Need to consolidate and centralize the information.
1	5		**29.** Hub layout maps are provided in the hub information display case. • Yes, but only by individual mode and operator.
0	6		**30.** Map of hub vicinity with landmarks and attractions is posted in the hub information case. • Need information about Castro street restaurants and downtown businesses.
6	2		**31.** Posted transit information (i.e. maps, schedules) is well maintained, accurate and easy to find. • Seems well maintained. Not easy to find and some are hidden behind a transit shelter. • Some information was duct taped. This not good for transit image.
2	4		**32.** Schedules, fare, transfer information and hub layout maps are located near bus stops and loading platforms. • There is only one display case at the center of the Caltrain platforms. • It was not clearly marked as "information."
0	3		**33.** Printed schedules and maps distributed at the hub contain accurate information and are consistent with the information provided in the Regional Transit Information Display Cases. • None for distribution.

Yes	No	N/A	**REAL-TIME SIGNAGE**
			Existing Real-Time Signage
3	4		**34.** Real-time signage is provided at the hub. • VTA LRT real-time signs. • Caltrain platform variable message signs which provide real-time information in the event of a service delay.
			35. Location of signs (indicate on station diagram).
			36. Description and photo of signage types. • VTA signs were hard to read and did not seem to be working well. • Caltrain signs were not working.
			37. Identification of transit services included on real-time signage (Include operator and mode).
			Future Real-Time Signage Installations
			38. Describe location(s) for future real-time signage locations (indicate on station diagram). Refer to Appendix A Real-Time Technology Guidelines page A-24 • Add real-time signs at Caltrain platform, central between Caltrain and VTA, and at the bus/shuttle shelter.
			39. Describe transit services that would be included in real-time signage displays. Refer to Appendix A pages A-24-26. • Provide next train, next bus, time, date and customer information.